AMENDMENTS TO THE SPECIFICATION

Please insert the following section heading on page 1, line 6:

TITLE OF THE INVENTION

Please insert the following section heading and paragraph on page 1, before line 9:

CROSS-REFERENCE TO RELATED APPLICATIONS

The present application is a 35 U.S.C. § 371 National Stage patent application of International patent application PCT/EP04/009684, filed on August 31, 2004, which claims priority to Italian patent application MI2003A001704, filed on September 4, 2003.

Please insert the following section heading and amend the paragraph beginning on page 1, line 9, as follows:

FIELD OF THE INVENTION

The present invention relates to ~~the use of dialkyl carbonates as solvents capable of reducing the volume of expanded polystyrene, and in particular to the use of dialkyl carbonates as solvents in~~ a new method for the recycling of expanded polystyrene.

Please insert the following section heading on page 1, before line 14:

DISCUSSION OF THE BACKGROUND

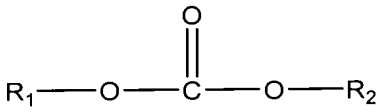
Please insert the following section heading on page 5, before line 6:

SUMMARY OF THE INVENTION

Please replace page 5, lines 6-25 and page 6, lines 1-7 with the following rewritten paragraph:

The present invention is directed to a process for recycling expanded polystyrene comprising:

volume reduction of expanded polystyrene by dissolution in a solution comprising a dialkyl carbonate, or a blend of dialkyl carbonates, having the following general formula (I):



(I)

wherein R_1 and R_2 are the same or different and each independently represent a linear, a branched or a cyclic alkyl radical having from 1 to 12 carbon atoms, and the sum of the carbon atoms of R_1 and R_2 is from 2 to 15;

removal of an insoluble component, if present;

selective precipitation of polystyrene with a non-solvent, wherein said selective precipitation of polystyrene is carried out at a temperature of 10-70°C, wherein the non-solvent is an alkylene carbonate, or a blend of non-solvents consisting of an alcohol and an alkylene carbonate, and wherein a weight ratio of the non-solvent to the dialkyl carbonate is from 2:1 to 20:1;

separation of precipitated polystyrene; and

drying of precipitated polystyrene.

Please insert the following section heading on page 6, before line 8:

DETAILED DESCRIPTION OF THE INVENTION

Please amend the paragraph beginning on page 6, line 13, as follows:

Exemplary dialkyl carbonates in accordance with the present invention ~~Dialkyl carbonates, whose use is the object of the present invention,~~ are thermally stable solvents, with a particularly favorable toxicological and eco-toxicological profile, which allows their storage and application without any particular precautions. Dialkyl carbonates can be prepared by the transesterification of dimethyl carbonate with alcohols, using the known methods, as described, for example in Chem. Rev. 96, 951-976 (1996). Dimethyl carbonate can, in turn, be obtained by the oxidative carbonylation of methanol, as described in EP 460732.

Please amend the paragraph beginning on page 10, line 22, as follows:

The polymer is dried at a temperature ranging from 50°C to 180°C, preferably within the range of 80°C to 150°C, and at a pressure ranging from 101 kPa to 0.1 kPa (760 mm Hg to 1 mm Hg), preferably within the range of 66.5 kPa to 1.3 kPa (500 mm Hg to 10 mm Hg).

Please amend the paragraph beginning on page 17, line 24, as follows:

The solid, after drying in an oven for 2 hours at a temperature of 140°C and a pressure of about 6.6 kPa (50 mmHg), has a weight of 15 g and the following composition: 99.75% by weight of polystyrene, 0.1% by weight of dibutyl carbonate, 0.04% by weight of butanol, 860 mg/Kg of bromine and 51 mg/Kg of dicumyl peroxide.

Please amend the paragraph beginning on page 20, line 4, as follows:

The solid, after drying in an oven for 2 hours at a temperature of 140°C and a pressure of about 6.6 kPa (50 mmHg), has a weight of 20.9 g and the following composition: 99.85% by weight of polystyrene, 0.05% by weight of dibutyl carbonate, 0.04% by weight of propylene carbonate, 0.01% by weight of butanol, 290 mg/Kg of bromine and 28 mg/Kg of dicumyl peroxide.